

Supplementary Material

Electrochemical detection of *p*-ethylguaiacol, a fungi infected fruit volatile using metal oxide nanoparticles

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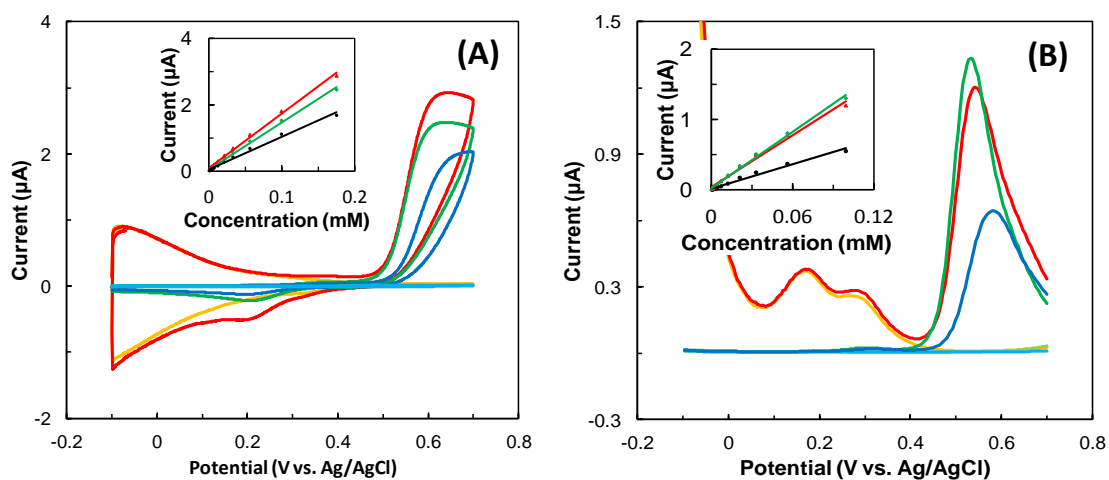


Fig S1: CV (A) and DPV (B) response of 0.17 mM and 0.1 mM *p*-ethylguaiacol respectively, at SnO₂ modified (red), TiO₂ modified (green) and unmodified (blue) SP electrodes. The inserts display the concentration effect within the linear range of *p*-ethylguaiacol oxidation at SnO₂ (red), TiO₂ (green) and unmodified SP (blue).

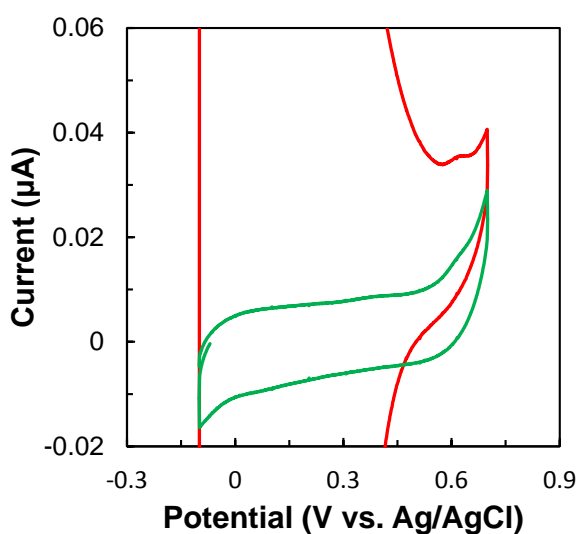


Fig S2: CV response of SnO₂ (red) and TiO₂ (green) modified SP electrodes without *p*-ethylguaiacol.

Table S1: Reproducibility of *p*-ethylguaiacol (2.5 mM) oxidation at SnO₂-SP and TiO₂-SP electrodes.

	SnO₂-SP	TiO₂-SP
Electrode 1	7.24	5.66
Electrode 2	7.10	5.39
Electrode 3	6.88	5.68
Electrode 4	7.02	6.01
Electrode 5	7.10	6.22
Electrode 6	7.34	6.16
Electrode 7	7.41	6.13
Electrode 8	7.39	6.14
Average	7.18	5.92
SD	0.18	0.29
RSD (%)	2.48%	4.85%

Table S2: Reusability of SnO₂-SP and TiO₂-SP electrodes for the determination of 2.5 mM *p*-ethylguaiacol.

Days	SnO₂-SP			TiO₂-SP		
	Current decrease (%)	SD	RSD (%)	Current decrease (%)	SD	RSD (%)
1	100.00			100.00		
2	72.40	0.92	16.01	60.94	1.21	24.27
3	53.11	1.29	25.60	49.52	1.34	30.81
4	53.80	1.27	27.30	33.11	1.53	40.48
5	40.04	1.39	32.57	22.52	1.67	50.48
6	32.01	1.50	38.24	16.60	1.74	59.57
10	29.49	1.54	42.45	17.41	1.74	65.28
15	32.19	1.53	44.19	18.99	1.70	68.56